

pre



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/704,244	11/02/2000	Jerome M. Gauthier	Sloan B-344	2637

7590 05/07/2003

Joel H Bock  
McEachran Jambor Keating Bock & Kurtz  
55 E Monroe Street Suite 2940  
Chicago, IL 60603-5880

EXAMINER

NGUYEN, NAM V

ART UNIT	PAPER NUMBER
----------	--------------

2635

DATE MAILED: 05/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/704,244	Applicant(s) GAUTHIER ET AL.	
	Examiner Nam V Nguyen	Art Unit 2635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 November 2000.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 November 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>3</u> . | 6) <input type="checkbox"/> Other:  |

### DETAILED ACTION

The application of Gauthier et al. for a “system for remote operation of a personal hygiene or sanitary appliance” filed November 2, 2000 has been examined.

Claims 1-21 are pending.

#### *Drawings*

This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the transmitter and receiver in the infrared sensor and in the flush valve in Figures 1A-1C must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

The drawings are objected to under 37 CFR 1.84(h)(5) because Figure 1B shows modified forms of construction in the same view with the faucet sensor system and the <sup>soap</sup>~~soup~~ dispenser system. Examiner suggests separating the two systems with another figure.

Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kolar et al. (US# 6,250,601) in view of Okamoto et al. (US# 6,522,078) and in view of Yamasaki (US# 6,075,454).

Referring to claim 1, Kolar et al. disclose a system for remote operation of a personal hygiene appliance which is one of a toilet flush valve, a urinal flush valve, a faucet, a shower head, a soap dispenser, a hand dryer, and a paper towel dispenser (appliance) (column 3 lines 45 to 59; see Figures 1A-1B), said system including the appliance (106) (i.e. a faucet), an electric operator (104) (i.e. control valve) for controlling operation of said appliance (106), an appliance radio receiver (134) (i.e. receiver for receiving reflected signal) connected electrically to said operator (124) to provide an activating signal thereto, an appliance radio transmitter (134) (i.e. transmitter for transmitting transmitted signal) connected to said appliance radio receiver (134) (column 4 lines 55 to column 5 line 30; see Figure 1B),

However, Kolar et al. did not explicitly disclose means remote from said appliance, for signaling an intent to cause operation of said appliance, a remote radio transmitter connected to said means for signaling an intent and operable thereby, an indicator located at said means for

Art Unit: 2635

signaling an intent, a remote radio receiver connected to said indicator to provide an operating signal therefor, and

Said remote radio transmitter being programmed to transmit a message unique to said means for signaling an intent (intent message), upon being activated by said means for signaling an intent, said appliance receiver being programmed to receive said intent message and upon receipt thereof to cause operation of said electric operator and to cause said appliance transmitter to send a message unique to said appliance (acknowledge message) to said remote receiver to acknowledge receipt of said intent message, said remote receiver, upon receipt of said acknowledge message, causing activation of said indicator.

In the same field of endeavor of wireless remote controlled system of detecting the human body to control a unit, Okamoto et al. teach that means (2) (i.e. human body detector) remote from said appliance (1b) (i.e. controller of a unit; see Figure 1), for signaling an intent to cause operation of said appliance (1b), a remote radio transmitter (L) (i.e. transmitter radiate signal) connected to said means (2) for signaling an intent and operable thereby, an indicator (5a) located at said means (2) for signaling an intent (column 5 lines 5 to column 6 line 8; see Figures 1-2),

Said remote radio transmitter (L) being programmed to transmit a message unique to said means (2) for signaling an intent (intent message), upon being activated by said means (2) for signaling an intent, said appliance receiver (10) being programmed to receive said intent message and upon receipt thereof to cause operation of said electric operator (12 and 16) (column 6 line 9 to column 7 lines 59; see Figures 1-2) and said remote receiver (2), upon receipt of said human body present, causing activation of said indicator (5a) (see Figure 1) in order to control the

Art Unit: 2635

operation of a household appliance by a remote sensor system wirelessly in a non-contact state automatically when detecting the human body is present in the vicinity.

In the same field of endeavor of portable remote controlled system, Yamasaki teaches that an appliance transmitter (11) to send a message unique to said appliance (acknowledge message) to said remote receiver (7) to acknowledge receipt of said intent message (column 6 lines 1 to 13; column 7 lines 49 to 53; column 8 lines 27 to 31; see Figures 2 and 5) in order to determine that the received signal is legal and the status of a unit is in the set state.

One of ordinary skilled in the art recognizes the need to add a remote controller that has a human body detector to transmit operational signal to the unit controller wirelessly of Okamoto et al. and a receiver to receive an acknowledgement of Yamasaki in the active sensor radar-controlled fluid flow control washroom device of Kolar et al. because Kolar et al. suggest it is desired to provide that active sensor controlling a washroom device operate touchless system and using infrared radio transmitter and receiver to control the faucet (column 4 lines 39 to 54) and Okamoto et al. teach that using a remote control device to detect the present of a human body to automatically controlled a remote unit (column 6 lines 9 to 19; see Figure 1) in order to avoid fix control target equipment and Yamasaki teaches that receiver to receive an acknowledgement signal (column 6 lines 1 to 15; see Figures 2 and 5) in order to determine the status of the transmission and the current condition of the control module. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to add a remote controller that has a human body detector to transmit operational signal to the unit controller wirelessly of Okamoto et al. and a receiver to receive an acknowledgement of Yamasaki in the active sensor radar-controlled fluid flow control washroom device of Kolar et

Art Unit: 2635

al. with the motivation for doing so would have been to provide an automatic wireless remote control of the public or private washroom fixtures in order to create a convenient and flexible system to operate for the users.

Referring to Claim 2, Kolar et al. in view of Okamoto et al. and in view of Yamasaki disclose the system of Claim 1, Okamoto discloses wherein said means (2) for signaling an intent includes an infrared sensor (column 5 lines 22 to 31).

Referring to Claim 3, Kolar et al. in view of Okamoto et al. and in view of Yamasaki disclose the system of Claim 1, Okamoto discloses wherein said means for signaling an intent includes a manually activated switch (8) (column 7 line 60 to column 8 line 5; see Figure 1).

Referring to Claim 4, Kolar et al. in view of Okamoto et al. and in view of Yamasaki disclose the system of Claim 1, Okamoto discloses wherein said means for signaling an intent include an infrared sensor and manually activated switch (column 10 lines 14 to 29; see Figure 1).

Referring to Claim 5, Kolar et al. in view of Okamoto et al. and in view of Yamasaki disclose the system of Claim 1, Kolar et al. disclose wherein said appliance (1000) is a flush valve connected to operate a urinal (column 16 lines 57 to 67; see Figures 10A-10C, 11).

Art Unit: 2635

Referring to Claim 6, Kolar et al. in view of Okamoto et al. and in view of Yamasaki disclose the system of Claim 1, Kolar et al. disclose wherein said appliance is a flush valve connected to operate a water closet (column 1 lines 16 to 34).

Referring to Claim 7, Kolar et al. in view of Okamoto et al. and in view of Yamasaki disclose the system of Claim 1, Kolar et al. disclose wherein said appliance is a faucet (column 4 lines 1 to 13; see Figure 1A).

Referring to Claim 8, Kolar et al. in view of Okamoto et al. and in view of Yamasaki disclose the system of Claim 1, Kolar et al. disclose wherein said appliance is a soap dispenser (column 4 lines 55 to 66).

Referring to Claim 9, Kolar et al. in view of Okamoto et al. and in view of Yamasaki disclose the system of Claim 1, Kolar et al. disclose wherein said appliance is a shower head (517) (column 4 lines 24 to 31; see Figure 5C).

Referring to Claim 10, Kolar et al. in view of Okamoto et al. and in view of Yamasaki disclose the system of Claim 1, Kolar et al. disclose wherein said appliance is a paper towel dispenser (column 4 lines 55 to 66).



Art Unit: 2635

Referring to Claim 12, Kolar et al. in view of Okamoto et al. and in view of Yamasaki disclose the system of Claim 1, Kolar et al. disclose wherein said appliance is a hand dryer (572) (column 4 lines 24 to 31; see Figure 5B).

Referring to Claim 13, Kolar et al. in view of Okamoto et al. and in view of Yamasaki disclose the system of Claim 1, Yamasaki et al. disclose wherein said intent message includes an address (i.e. ID code) unique to a specific appliance (column 5 line 29 to column 6 lines 31; see Figures 1-2), and said acknowledge message includes an address unique (ID code) to a specific appliance, but differing from the address of said intent message (column 10 lines 39 to 60; see Figures 4-5).

Claims 14-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kolar et al. (US# 6,250,601) in view of Okamoto et al. (US# 6,522,078) and in view of Yamasaki (US# 6,075,454) and in view of Pope (US# 5,963,624).

Referring to claim 14, Kolar et al. in view of Okamoto et al. and in view of Yamasaki disclose, to the extent as claimed with respect to claim 1 above, and Kolar et al. disclose the system further including:

Multiple personal hygiene appliances (see Figure 12 and 13), however, Kolar et al. in view of Okamoto et al. and in view of Yamasaki did not disclose

A central processing unit (CPU) having a microprocessor, a radio receiver and a radio transmitter connected thereto, the CPU radio receiver being capable of receiving intent messages

Art Unit: 2635

from all remote radio transmitters and the CPU radio transmitter being capable of sending messages (operate messages) to all appliance radio receivers, the microprocessor being programmed upon receipt of an intent message from a specific transmitter, unique to that transmitter's associated appliance, of causing the CPU transmitter to send an operating message, unique to the receiver associated with that appliance for causing operation of its electric operator.

In the same field of endeavor of remote controlled system, Pope discloses a central processing unit (CPU) (12) (i.e. the base unit; see Figure 1) having a microprocessor (84) (see Figure 3), a radio receiver (82) and a radio transmitter (94) connected thereto (column 2 lines 45 to 60; column 4 lines 62 to column 5 lines 14), the CPU radio receiver (82) being capable of receiving intent messages from all remote radio transmitters (52) (see Figure 2) and the CPU radio transmitter (94) being capable of sending messages (operate messages) to all appliance radio receivers (i.e. infrared receivers in the 14-22; see Figure 1), the microprocessor (84) being programmed upon receipt of an intent message from a specific transmitter (52), unique to that transmitter's associated appliance (i.e. one of 14-22), of causing the CPU transmitter (94) to send an operating message, unique to the receiver (14-22) associated with that appliance for causing operation of its electric operator (i.e. operation) (column 3 lines 29 to column 4 lines 61; column 5 lines 15 to 33; see Figures 1 and 5) in order to control the operation of multiple appliances remotely with only one base station.

One of ordinary skilled in the art recognizes the need to add a wireless remote control base station to control multiple appliances remotely of Pope in the hardwire central control of the appliances of Kolar et al. in view of Okamoto et al. and in view of Yamasaki because Kolar et al. suggest it is desired to provide a central control center to control and operate the radar unit from

Art Unit: 2635

a remote distance (column 21 line 64 to column 22 line 61; see Figures 12A-B, 13, 21A) and Okamoto et al. teach that using one central base station to control multiple appliances remotely from a remote control handset (column 3 lines 29 to column 4 lines 61; see Figure 1) in order to avoid each of appliances require to connect to a central control station. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to add a wireless remote control base station to control multiple appliances remotely of Pope in the hardwire central control of the appliances of Kolar et al. in view of Okamoto et al. and in view of Yamasaki with the motivation for doing so would have been to provide an automatic wireless remote central control station to control multiple appliances in order to create a convenient and flexible system to operate.

Referring to Claim 15, Kolar et al. in view of Okamoto et al., Yamasaki and Pope disclose the system of Claim 14, Okamoto discloses wherein said means (2) for signaling an intent includes an infrared sensor (column 5 lines 22 to 31).

Referring to Claim 16, Kolar et al. in view of Okamoto et al., Yamasaki and Pope disclose the system of Claim 14, Okamoto discloses wherein said means for signaling an intent includes a manually activated switch (8) (column 7 line 60 to column 8 line 5; see Figure 1).

Referring to Claim 17, Kolar et al. in view of Okamoto et al., Yamasaki and Pope disclose the system of Claim 14, Okamoto discloses wherein said means for signaling an intent

Art Unit: 2635

include an infrared sensor and manually activated switch (column 10 lines 14 to 29; see Figure 1).

Referring to Claim 18, Kolar et al. in view of Okamoto et al., Yamasaki and Pope disclose the system of Claim 14, the claim 18 same in that the claim 13 already addressed above, therefore claim 18 is also rejected for the same reasons given with respect to claim 13.

Referring to Claims 19-20, Kolar et al. in view of Okamoto et al., Yamasaki and Pope disclose the system of Claim 14, the claims 19-20 same in that the claim 1 already addressed above, therefore claims 19-20 are also rejected as being obvious for the same reasons given with respect to claim 1.

Referring to Claim 21, Kolar et al. in view of Okamoto et al., Yamasaki and Pope disclose the system of Claim 20, the claim 21 same in that the claim 12 already addressed above, therefore claim 21 is also rejected for the same reasons given with respect to claim 12.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ericksen et al. (US# 6,337,635) disclose a remotely controllable programmable hose faucet valve system.

Art Unit: 2635

Shaw et al. (US# 5,812,059) disclose a method and system for improving hand cleanliness.

Evans et al. (US# 5,610,589) disclose a method and apparatus for enforcing hygiene.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nam V Nguyen whose telephone number is 703-305-3867. The examiner can normally be reached on Mon-Fri, 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on 703-305-4704. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Nam Nguyen  
May 2, 2003

PN

MICHAEL HORABIK  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600

